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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,022	02/07/2002	Engelbert Heinz	14584.004US	1879

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TECHNOPROP COLTON, L.L.C.  
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ATLANTA, GA 311567685

EXAMINER

IZAGUIRRE, ISMAEL

ART UNIT	PAPER NUMBER
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3765

DATE MAILED: 08/13/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

8C

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/072,022		HEINZ ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Ismael Izaguirre		3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 May 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-9,12,16-21,24-30,34,35 and 38 is/are rejected.
- 7) ☒ Claim(s) 5,10,11,13-15,22,23,31-33,36,37 and 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |                                                                                                              |                                                                             |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> . | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

### ***SPECIFICATION***

#### ***Abstract***

The abstract of the disclosure is objected to because it should include a single paragraph, limited to 150 words and describe the improvement to the ironing apparatus. Correction is required. See MPEP § 608.01(b).

#### ***Headings***

Applicant is asked to take note the preferred arrangement and headings directed to a specification: except for the title, each of the lettered items should preferably be preceded by the headings indicated below.

- (a) Cross-Reference to Related Application(s) (if any).
- (b) Background of the Invention.
  - 1. Field of the Invention (or Technical Field).
  - 2. Description of the Related Art (or Background Information or Background Art)
- (c) Summary of the Invention (or Disclosure of Invention).
- (d) Brief Description of the Drawing(s).
- (e) Description of the Preferred Embodiment(s)
- (f) Claim(s).
- (g) Abstract of the Disclosure (or Abstract).

Providing the above would place the specification in accordance with the suggestions of those portions of MPEP §§ 601 or 608.01 concerning "proper headings".

### ***CLAIMS***

#### ***Summary***

Claims 1,8,12,16,24 and 34 are the independent claims under consideration in this Office Action.

Claims 2-7,9-11,13-15,17-23,25-33 and 35-39 are the dependent claims under consideration in this Office Action.

***Claim Language***

In claim 1, last line, the word "grater" should be replaced by "greater".

***Claim Rejections - 35 U.S.C. § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16-21 are rejected under 35 U.S.C. § 102(b) as being anticipated by Geiger (5,598,649).

Geiger teaches a trough mangle having in particular a mangle roll 10 that can be driven by a motor 48 so as to revolve and a flexible trough 20 associated with the mangle roll. Wherein the mangle roll is supported at each end by bearings 14 (figure 6, for example). A lever mechanism 12 is further provided for pivoting and supporting the weight of the mangle roll. The lever 12 pivots about a compensating shaft 18 and connects the two arms with each other. Pneumatic means 16 are provided for pivoting and adjusting the spacing between the mangle roll and the mangle trough. This allows the adjustment of the force placed on the material being ironed between the roll and trough.

Claims 24-30 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ferrage et al. (4,787,157).

Ferrage et al teach a trough mangle having in particular a mangle roll 2 that can be driven by a motor 5 so as to revolve and a flexible trough 15 associated with the mangle roll. Wherein the mangle trough is formed of trough sections 30,31 and 32 connected to one another. The trough extends over part of the mangle (figure 1) to about half the circumference. The trough sections 30, 31 and 32 are independently supplied with heating means and tubing and are connected to each other for engaging the materials being fed between the trough and the mangle roll.

***Claim Rejections - 35 U.S.C. § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4,6,8 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ferrage et al.

Ferrage et al. disclose the invention substantially as claimed. See above for specific explanations of the structural details of this document. Briefly, Ferrage et al teach a trough mangle having in particular a mangle roll 2 that can be driven by a motor 5 so as to revolve and a flexible trough 15 associated with the mangle roll. Further,

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Ferrage et al. teaches the roll being of a substantial size. From column 2, lines 42 and thereafter, Ferrage et al. teach the mangle roll being larger than 100 centimeters. That is, larger than 000 mm. However, Ferrage et al. do not specifically suggest the mangle roll being greater than 1600mm or ranging between 1600 and 2400 mm.

It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to construct the mangle roll of Ferrage et al. as being specifically defined by a size larger than 1600mm or ranging between 1600 and 2400 mm.

Providing such size definitions would further illustrate the methods and structure defined by Ferrage et al. for compensating of a gap between the roll and trough of such a machine for which the invention of Ferrage et al. is directed to.

Claims 7,34,35 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ferrage et al. in view of Katterbach et al. (4,584,747).

Ferrage et al. disclose the invention substantially as claimed. See above for specific explanations of the structural details of this document. Briefly, Ferrage et al teach a trough mangle having in particular a mangle roll 2 that can be driven by a motor 5 so as to revolve and a flexible trough 15 associated with the mangle roll. Further, Ferrage et al. teach the mangle roll comprising a wrapping by a sleeve-like elastic and permeable outer lining 3. However, Ferrage et al. do not specifically suggest the wrapping including a thickness range of between 6 and 25 mm.

Katterbach et al teach an ironing mangle roller including an outer diameter of between 180-1600 mm and an outer padding layer for engaging the material being

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ironed as including a thickness of between 8 to 12 mm. The padding layer is taught as comprising needle felt (column 1, line 15).

It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to construct the mangle roll of Ferrage et al. as including a lining on the outer surface of a padding having a thickness of about 8 to 12 mm. Providing such a lining would allow the elastic covering to form a gentle coacting surface with the material being ironed. The padding layer would "grip" the material and feed it along the ironing path and allow the wrinkles to be removed from the material without causing a "shining" of the material yet allow the heat of the roll to pass to the material being ironed.

Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ferrage et al. in view of Wang (4,763,031).

Ferrage et al. disclose the invention substantially as claimed. See above for specific explanations of the structural details of this document. Briefly, Ferrage et al teach a trough mangle having in particular a mangle roll 2 that can be driven by a motor 5 so as to revolve and a flexible trough 15 associated with the mangle roll. However, Ferrage et al. do not specifically suggest the motor assembly 5 including an epicyclical gearbox.

Wang teaches an electric motor including a drive portion 10 having an output shaft 24 which further extend into a casing 20 which houses a gearing section. The gearing section comprises an epicyclic gear assembly. The epicyclic gear assembly comprising a sun, ring, and a plurality of planet gears.



It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to construct the mangle roll of Ferrage et al, as including a motor and gear assembly where the gear assembly would comprise an epicyclic gear assembly. Providing such gearing would provide a smooth running of the mangle roll allowing the material being ironed to present a more uniform dewrinkling thereof.

### ***DRAWINGS***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the torque-transmitting means of claim 10 and the splined profile of said means of claim 11 must be shown or the feature cancelled from the claim. No new matter should be entered.

### ***ALLOWABLE SUBJECT MATTER***

Claims 5,10,11,13-15,22,23,31-33,36,37 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***PERTINENT CITATIONS***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ionue et al. Illustrate a mangle roller with a planetary gearing at an end of the roll. Zwaard illustrates an ironing mangle including a pivoting structure with a connecting shaft connecting both ends of the roll with each other. Geiger "868 and Lapauw illustrate rollers with diameters of 1000 mm and 600 – 1000mm. Huggett et al. Illustrate a epicyclic drive train.

***INQUIRIES***

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 308-0861.

Any inquiry concerning this communication or earlier communications directed to the examiner should be directed to Mr. Ismael Izaguirre at (703) 308-0892 located in CP2-4B18, Monday through Friday 9:30am to 6:00pm.



**Ismael Izaguirre  
Primary Examiner  
Group Art Unit 3765**